

CRFI 1646



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1600

#11  
2-1203

## RAW SEQUENCE LISTING

DATE: 01/17/2003

PATENT APPLICATION: US/09/711,724A

TIME: 07:55:15

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006SubstituteSequence.txt

Output Set: N:\CRF4\01172003\I711724A.raw

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JAN 21 2003

TECH CENTER 1600/2900

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5 <110> APPLICANT: Ingham et al.
7 <120> TITLE OF INVENTION: SCREENING ASSAYS FOR HEDGEHOG AGONISTS AND ANTAGONISTS
9 <130> FILE REFERENCE: HMSU-P14-006
11 <140> CURRENT APPLICATION NUMBER: 09/711724A
12 <141> CURRENT FILING DATE: 2000-11-13
14 <150> PRIOR APPLICATION NUMBER: 08/674509
15 <151> PRIOR FILING DATE: 1996-07-07
17 <160> NUMBER OF SEQ ID NOS: 54
19 <170> SOFTWARE: PatentIn version 3.1
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22 <211> LENGTH: 1277
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37 atgactcagc gctgcaagga caagctgaat gccctggcga tctcggtgat gaaccagtgg      360
39 cccggggtga agctgagggt gaccgagggc tgggacgagg atggccatca ctccgaggaa      420
41 tcgctgcact acgagggtcg cgccgtggac atcaccacgt cggatcgga cgcagcaag      480
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47 tgettccttg gctcagccac agtgacactg gagcatggag gcaccaagct ggtgaaggac      660
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55 cacaaccagt cggaggccac aggggtccacc agtggccagg cgctcttcgc cagcaacgtg      900
57 aagcctggcc aacgtgtcta tgtgtgggc gagggcgggc agcagctgct gccggcgtct      960
59 gtccacagcg tctcattgcy ggaggaggcg tccggagcct acgcccact caccgcccag      1020
61 ggcaccatcc tcatcaaccg ggtgttgcc tctgctacg ccgtcatcga ggagcacagt      1080
63 tgggcccatt gggccttcgc accattccgc ttggctcagg ggctgctggc cgccctctgc      1140
65 ccagatgggg ccatccctac tgccgccacc accaccactg gcatccattg gtactcacgg      1200
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83 gggccagcgg aggggagggg aacaaggggg tcggagcgc tccgggacct cgtacccaac 240
85 tacaaccccc acataatctt caaggatgag gagaacagcg gcgcagaccg cctgatgaca 300
87 gagcggttgca aagagcgggt gaacgctcta gccatcgcgg tgatgaacat gtggcccgga 360
89 gtacgcctac gtgtgactga aggctgggac gaggacggcc accacgcaca ggattcactc 420
91 cactacgaag gccgtgcctt ggacatcacc acgtctgacc gtgaccgtaa taagtatggt 480
93 ttgttgggcg gcctagctgt ggaagccgga ttcgactggg tctactacga gtcccgaac 540
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99 cgtggtgact gggtagctggc cgctgatgca gcgggcccag tggtagccac gccagtgtctg 720
101 ctcttctctg accgggatct gcagcgccgc gcctcggttc tggctgtgga gaccgagcgg 780
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107 ctggctcccg gcggggacgc gctccagccg gcgcgcgtag cccgcgtggc gcgcgaggaa 960
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113 cggctgctgc acgcgctcgg ggctctgctc cctgggggtg cagtccagcc gactggcatg 1140
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127 cctcgcaagc tcgtgcctct tgccatacaag cagttcagcc ccaacgtgcc ggagaagacc 180
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139 aataagtatg gactgctggc gcgcttagca gtggaggccg gcttcgactg ggtgtattac 540
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145 tcagctgtaa agccaggaga ccgggtgctg gccatggggg aggatgggac ccccaccttc 720
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151 gacaatcata cagaaccagc agcccacttc cgggccacat ttgccagcca tgtgcaacca 900
153 ggccaatatg tgctgggtatc aggggtacca ggccctccagc ctgctcgggt ggcagctgtc 960
155 tccaccaacg tggcccttgg gtccctatgct cctctcaciaa ggcattgggac acttggtgtg 1020
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159 ttctggcccc tgcgactgtt tcccagttt gcattgggca gctggacccc aagtgaggg 1140
161 gttcactcct accctcagat gctctaccgc ctggggcgct tcttgctaga agagagcacc 1200
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168 <211> LENGTH: 1313
169 <212> TYPE: DNA
170 <213> ORGANISM: Mus musculus

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177	acccttttag	cctacaagca	gtttattccc	aacgtagccg	agaagaccct	agggggccagc	180
179	ggcagatatg	aagggaagat	cacaagaaac	tccgaacgat	ttaaggaaact	caccccccaat	240
181	tacaaccccg	acatcatatt	taaggatgag	gaaaacacgg	gagcagaccg	gctgatgact	300
183	cagaggtgca	aagacaagtt	aaatgccttg	gccatctctg	tgatgaacca	gtggcctgga	360
185	gtgaggctgc	gagtgaaccg	gggctgggat	gaggacggcc	atcattcaga	ggagtctcta	420
187	cactatgagg	gtcagagcag	ggacatcacc	acgtccgacc	gggaccgcag	caagtacggc	480
189	atgctggctc	gcctggctgt	ggaagcaggt	tccgactggg	tctactatga	atccaaagct	540
191	cacatccact	gttctgtgaa	agcagagaac	tccgtggcgg	ccaaatccgg	cggtgttttc	600
193	ccgggatccg	ccaccgtgca	cctggagcag	ggcggcacca	agctggtgaa	ggacttacgt	660
195	cccggagacc	gcgtgctggc	ggctgacgac	cagggccggc	tgctgtacag	cgacttcctc	720
197	accttcctgg	accgcgacga	aggcgccaag	aaggtcttct	acgtgatcga	gacgctggag	780
199	ccgcgcgagc	gcctgctgct	caccgcgcgc	cacctgctct	tcgtggcgcc	gcacaacgac	840
201	tcggggccca	cgcccgggcc	aagcgcgctc	tttgccagcc	gcgtgcgccc	cgggcagcgc	900
203	gtgtacgtgg	tggtgaacg	cggcggggac	cgccggctgc	tgcccgccgc	ggtgcacagc	960
205	gtgacgctgc	gagaggagga	ggcgggcgcg	tacgcgccgc	tcacggcgca	cggcaccatt	1020
207	ctcatcaacc	gggtgctcgc	ctcgtgctac	gctgtcatcg	aggagcacag	ctgggcacac	1080
209	cgggccttcg	cgcttttccg	cctggcgcac	gcgtgctgg	ccgcgctggc	acccgcccgcc	1140
211	acggacggcg	ggggcggggg	cagcatccct	gcagcgcaat	ctgcaacgga	agcgaggggc	1200
213	gcggagccga	ctgcgggcat	ccactggtac	tcgcagctgc	tctaccacat	tggcacctgg	1260
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218 &lt;211&gt; LENGTH: 1256

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227	cctctcgct	acaagcagtt	cataccta	gtcgcggaga	agaccttagg	ggccagcggc	180
229	agatacgagg	gcaagataac	gcgcaattcg	gagagattta	aagaacttac	tccaaattac	240
231	aatcccga	ttatctttta	ggatgaggag	aacacgggag	cgacagggct	catgacacag	300
233	agatgcaaag	acaagctgaa	ctcgtggtgg	atctctgtaa	tgaaccactg	gccaggggtt	360
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239	ctgtctcgcc	tagctgtgga	ggctggattt	gactgggtct	attacgagtc	caaagcccac	540
241	attcattgct	ctgtcaaagc	agaaaattcg	gttgctgcga	aatctggggg	ctgtttccca	600
243	ggttcgggct	tggtctcgct	ccaggacgga	ggacagaagg	ccgtgaagga	cctgaacccc	660
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255	cagcggggct	cgttcgcacc	agtgactgca	catgggacca	ttgtggtcga	cagaatactg	1020
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259	aggctctatt	attacgtgtc	atcattcctg	tccccaaaa	ctccagcagt	cggtccaatg	1140
261	cgactttaca	acaggagggg	gtccactggt	actccaggct	cctgtcatca	aatgggaacg	1200
263	tggcttttgg	acagcaacat	gcttcacatc	ttggggatgt	cagtaaaactc	aagctg	1256

## RAW SEQUENCE LISTING

DATE: 01/17/2003

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Output Set: N:\CRF4\01172003\I711724A.raw

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273 <223> OTHER INFORMATION: n=a, c, g, or t
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280 cctttagcct acaagcagtt tatccccaat gtggccgaga agaccctagg cgccagcgga      180
282 aggtatgaag ggaagatctc cagaaactcc gagcgattta aggaactcac cccaattac      240
284 aaccccgaca tcatatttaa ggatgaagaa aacaccggag cggacaggct gatgactcag      300
286 aggtgtaagg acaagttgaa cgctttggcc atctcgggtg tgaaccagtg gccaggagtg      360
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292 ctggcccggc tggcggtgga ggccggcttc gactgggtgt actacgagtc caaggcacat      540
294 atccactgct cggtgaaagc agagaactcg gtggcgggcca aatcgggagg ctgcttcccg      600
296 ggctcgggcca cggtgacact ggagcagggc ggcaccaagc tggtgaaagga cctgagcccc      660
298 ggggaccgcg tgctggcggc ggacgaccag ggccggctgc tctacagcga ctctctcact      720
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302 cgcgagcgcc tgctgctcac cgccgcgcac ctgctctttg tggcgccgca caacgactcg      840
304 gccaccgggg agcccagggc gtctctgggc tcggggccgc cttccggggg cgcactgggg      900
306 cctcggggcg tgctcgccag ccgctgctgc ccgggcccgc gcgtgtacgt ggtggccgag      960
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320 caaataggca cctggctcct ggacagcgag gccctgcacc cgctgggcat ggcggtcaag      1380
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356 gccttctggc ccctgagact ctttcacagc ttggcatggg gcagctggac cccgggggag 840
358 ggtgtgcatt ggtaccccca gctgctctac cgcttggggc gtctcctgct agaagagggc 900
360 agcttcacc cactgggcat gtccggggca gggagctga 939
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363 <211> LENGTH: 425
364 <212> TYPE: PRT
365 <213> ORGANISM: Gallus gallus
367 <400> SEQUENCE: 8
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374 20 25 30
377 Ile Gly Lys Arg Arg His Pro Lys Lys Leu Thr Pro Leu Ala Tyr Lys
378 35 40 45
381 Gln Phe Ile Pro Asn Val Ala Glu Lys Thr Leu Gly Ala Ser Gly Arg
382 50 55 60
385 Tyr Glu Gly Lys Ile Thr Arg Asn Ser Glu Arg Phe Lys Glu Leu Thr
386 65 70 75 80
389 Pro Asn Tyr Asn Pro Asp Ile Ile Phe Lys Asp Glu Glu Asn Thr Gly
390 85 90 95
393 Ala Asp Arg Leu Met Thr Gln Arg Cys Lys Asp Lys Leu Asn Ala Leu
394 100 105 110
397 Ala Ile Ser Val Met Asn Gln Trp Pro Gly Val Lys Leu Arg Val Thr
398 115 120 125
401 Glu Gly Trp Asp Glu Asp Gly His His Ser Glu Glu Ser Leu His Tyr
402 130 135 140
405 Glu Gly Arg Ala Val Asp Ile Thr Thr Ser Asp Arg Asp Arg Ser Lys
406 145 150 155 160
409 Tyr Gly Met Leu Ala Arg Leu Ala Val Glu Ala Gly Phe Asp Trp Val
410 165 170 175
413 Tyr Tyr Glu Ser Lys Ala His Ile His Cys Ser Val Lys Ala Glu Asn
414 180 185 190
417 Ser Val Ala Ala Lys Ser Gly Gly Cys Phe Pro Gly Ser Ala Thr Val
418 195 200 205
421 His Leu Glu His Gly Gly Thr Lys Leu Val Lys Asp Leu Ser Pro Gly
422 210 215 220
425 Asp Arg Val Leu Ala Ala Asp Ala Asp Gly Arg Leu Leu Tyr Ser Asp
426 225 230 235 240
429 Phe Leu Thr Phe Leu Asp Arg Met Asp Ser Ser Arg Lys Leu Phe Tyr
430 245 250 255
433 Val Ile Glu Thr Arg Gln Pro Arg Ala Arg Leu Leu Leu Thr Ala Ala
434 260 265 270
437 His Leu Leu Phe Val Ala Pro Gln His Asn Gln Ser Glu Ala Thr Gly
438 275 280 285
441 Ser Thr Ser Gly Gln Ala Leu Phe Ala Ser Asn Val Lys Pro Gly Gln
442 290 295 300
445 Arg Val Tyr Val Leu Gly Glu Gly Gly Gln Gln Leu Leu Pro Ala Ser

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/711,724A

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Seq#:18; N Pos. 15,32,36  
Seq#:19; N Pos. 24,27  
Seq#:20; N Pos. 13,16,19,23,27  
Seq#:30; N Pos. 6,23,27  
Seq#:31; N Pos. 4,7,10,14,19,22  
Seq#:38; N Pos. 20,23  
Seq#:39; N Pos. 11,26  
Seq#:40; Xaa Pos. 7,9,44,85,93,98,112,132,137,139,181,183,185,186,189,191  
Seq#:40; Xaa Pos. 196,200,206,207,209,211,212,216,217,219  
Seq#:41; Xaa Pos. 7,8,9,12,13,14,17,19,22,27,29,30,31,33,40,41,44,45,46,48  
Seq#:41; Xaa Pos. 53,54,71,79,83,84,85,87,95,100,107,114,115,116,125,134  
Seq#:41; Xaa Pos. 135,139,141,157,158,160,162,166,167

## VERIFICATION SUMMARY

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TIME: 07:55:16

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006SubstituteSequence.txt

Output Set: N:\CRF4\01172003\I711724A.raw

L:322 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:1380  
L:1190 M:283 W: Missing Blank Line separator, <220> field identifier  
L:1200 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0  
L:1216 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0  
L:1232 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0  
L:1347 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0  
L:1363 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0  
L:1601 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0  
L:1617 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:0  
L:1762 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0  
L:1768 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:32  
L:1777 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:80  
L:1780 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:96  
L:1786 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:128  
L:1795 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:176  
L:1798 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:192  
L:1801 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:208  
L:2040 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:0  
L:2043 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:16  
L:2046 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:32  
L:2049 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:48  
L:2052 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:64  
L:2055 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:80  
L:2058 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:96  
L:2061 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:112  
L:2064 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:128  
L:2067 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:144  
L:2070 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:160